

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	10/709999	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 06:47
L2	0	2005/0020076	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 06:48
L3	1	"20050020076"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 06:51
L4	1	"20040043526"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 06:53
L5	3233325	"20040223267" A1	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 06:53
L6	2	"20040223267"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 06:55
L7	1	"20040084400"	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 07:01
L8	6	("20020036876" "20020142192" "5346841" "6083794" "6452764" "6759263").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 07:01
L9	53	("20020036876" "20020142192" "5346841" "6083794" "6452764" "6759263")	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 07:03

## EAST Search History

L10	40	("0009616" "0048127" "20030198113" "20030198113" "0181056" "20040001350" "20040001350" "20040043526" "20040051522" "20040051522" "20040084400" "20040252559" "20040252559" "20040253437" "20040253437" "20050020076" "20050050399" "20050050399" "20050079647" "20050079647" "20050079683" "20050079683" "20050087519" "20050087519" "20050088875" "20050088875" "20050102581" "20050102581" "20050127418" "20050127418" "20050151552" "20050151552" "20050185458" "20050185458" "2005019872" "2005019872" "200502569" "200502569" "20050228" "20050228" "2005034887" "2005034887" "200506104633" "200506104633" "200506299991" "200506299991" "200506333067" "200506333067" "200506385082" "200506385082" "200506452764" "200506452764" "200506660568" "200506660568" "200506784091" "200506784091" "200506812141" "200506812141" "200506365419" "200506495275" "200506548849").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 07:03
L11	362	("0009616" "0048127" "20030198113" "20030198113" "0181056" "20040001350" "20040001350" "20040043526" "20040051522" "20040051522" "20040084400" "20040252559" "20040252559" "20040253437" "20040253437" "20050020076" "20050050399" "20050050399" "20050079647" "20050079647" "20050079683" "20050079683" "20050087519" "20050087519" "20050088875" "20050088875" "20050102581" "20050102581" "20050127418" "20050127418" "20050151552" "20050151552" "20050185458" "20050185458" "2005019872" "2005019872" "200502569" "200502569" "20050228" "20050228" "2005034887" "2005034887" "200506104633" "200506104633" "200506299991" "200506299991" "200506333067" "200506333067" "200506385082" "200506385082" "200506452764" "200506452764" "200506660568" "200506660568" "200506784091" "200506784091" "200506812141" "200506812141" "200506365419" "200506495275" "200506548849").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 07:04
L12	402	11 or 9	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 07:04
L13	23	12 and ((mask hardmask) near3 (metal conductive))	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 07:19

## EAST Search History

L14	259	("MTJ" magnetic ajd tunnel adj junction) and ((mask hardmask) near3 (metal conductive)) with (conductive near3 line wiring wire)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 07:22
L15	0	12 and ((pinned free) near3 layer ) with ("MTJ" magnetic ajd tunnel adj junction) and ((mask hardmask) near3 (metal conductive)) with (conductive near3 line wiring wire)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 07:23
L16	34	14 and ((pinned free) near3 layer ) with ("MTJ" magnetic ajd tunnel adj junction)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 07:24
S40	1435	(magnetic adj tunnel adj junction "MTJ" "MRAM" (magnetoresistive magneto adj resistive) near3 memory) with (free pinned) near3 (layer film)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 12:24
S41	894	S40 and barrier with (free pinned) near3 (layer film)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 12:25
S42	75	S41 and (mask\$3 hardmask\$3) same barrier with (free pinned) near3 (layer film)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 13:34
S43	1435	(magnetic adj tunnel adj junction "MTJ" "MRAM" (magnetoresistive magneto adj resistive) near3 memory) with (free pinned) near3 (layer film)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 13:35
S44	894	S43 and barrier with (free pinned) near3 (layer film)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 14:10
S45	75	S44 and (mask\$3 hardmask\$3) same barrier with (free pinned) near3 (layer film)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 13:35
S46	3	S45 and (free) near3 (layer film) with (inacti\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 13:37
S47	5	S44 and free with inact\$4	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 13:58
S48	580	S44 and free with resist\$4	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 13:58

## EAST Search History

S49	1022	S43 and (barrier nonmagnetic insulator) with (free pinned) near3 (layer film)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 14:15
S50	10	S49 and (free ) near3 (layer film) with convers\$4	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 14:11
S51	82	S43 and (barrier nonmagnetic insulator) with (free pinned) near3 (layer film) same (mask\$3 hardmask\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 14:29
S52	1	10/709999	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 14:23
S53	318	S43 and (barrier nonmagnetic insulator) with (free pinned) near3 (layer film) and (mask\$3 hardmask\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 14:30
S54	281	S53 and (free ) near3 (layer film) and (mask\$3 hardmask\$3 hard nwae3 mask\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/17 14:32
S55	281	S53 and (free ) near3 (layer film) and (mask\$3 hardmask\$3 hard near3 mask\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/18 08:19
S56	38	S55 and (free mask\$3 hardmask\$3 hard near3 mask\$3) with (oxidation oxidizing oxioxidization oxidized)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/18 10:31
S57	2	10/283348	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/08/25 06:35
S58	2	((free ) near3 (layer film)) with (mask\$3 hardmask\$3 hard near3 mask\$3) with anodi\$4	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/18 08:21
S59	0	((free adj layer )) with (mask\$3 hardmask\$3 hard near3 mask\$3) with (anodi\$4 anodization)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/18 08:21
S60	5	((free adj layer )) with (anodi\$4 anodization)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/18 08:22

## EAST Search History

S61	240	sputtering with (method process) and (plasma near3 bombardment) with (method process)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/18 10:33
S62	76	sputtering with (method process) same (plasma near3 bombardment) with (method process)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/18 10:34
S63	88	sputtering with (method process) and (plasma near3 bombardment) with (method process) and (planarization planarizing planar\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/18 10:37
S64	29	sputtering near3 (method process) and (plasma near3 bombardment) near3 (method process) and (planarization planarizing planar\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/18 10:41
S65	9	sputtering near3 (method process) and (plasma near3 bombardment) near3 (method process) same (planarization planarizing planar\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/18 10:44
S66	9	(sputtering near3 (method process) and (plasma near3 bombardment) near3 (method process)) same (planarization planarizing planar\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/18 10:44
S67	1	(sputtering near3 (method process) and (plasma near3 bombardment) near3 (method process)) with (planarization planarizing planar\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO	OR	ON	2006/04/18 10:45